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10/578,379

05/05/2006

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EXAMINER

MULL, FRED H

ART UNIT

PAPER NUMBER

3662

MAIL DATE

DELIVERY MODE

12/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/578,379

Applicant(s)

FERREOL ET AL.

Examiner

Fred H. Mull

Art Unit

3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-12 and 14-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10 and 18 is/are rejected.
- 7) ☒ Claim(s) 11, 12 and 14-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 10 is objected to because of the following informalities:

In line 6, "of" should be deleted.

In line 9, "the" should be deleted, since this is the first usage of the term "instants".

In line 11, the second instance of "of" should be deleted.

In line 13, "a" should be changed to --the--, since "period DT" was previously referred to in line 9.

In line 14, the "." before the second instance of "the" should be a space.

In line 15, "the vectors" should be --the direction vectors" in order to be consistent with the previous usages in line 8.

In line 16, "differents" should be --different--.

2. Claim 11 is objected to because of the following informalities:

In line 5, "the vector" should be --the direction vector" in order to be consistent with the previous usages in claim 10, line 8.

3. Claim 12 is objected to because of the following informalities:

In the final line, "the vectors" should be --the direction vectors" in order to be consistent with the previous usages in claim 10, line 8.

4. Claim 18 is objected to because of the following informalities:

In line 2, "the vector" should be --the direction vector" in order to be consistent with the previous usages in claim 10, line 8.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 10 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Beadle.

In regard to claim 10, Beadle discloses:

each source being in motion relative to a network of sensors (¶¶79-80), where the method is applicable for slow relative motion (¶¶79, lines 39-43; ¶¶80, lines 3-7). It is noted that claim 10 encompasses all speeds of relative motion.;

separating the sources (309, Fig. 10) in order to identify the direction vectors associated with the response of the sensors to a source at a given incidence, said incidence angles varying depending on the position of the sensors network relative to said sources ("Steering Vector estimates", Fig. 10);

associating direction vectors $a_{1m}...a_{Km}$ obtained for the m^{th} transmitter and respectively at instants $t_1...t_k$, are associated during a period Dt (time gate) in order to separate the different sources for each instant $t_1...t_k$, said incidence angles varying depending on the position of the sensors network relative to said sources (§79, lines 15-36);

wherein the direction vectors $a_{1m}...a_{Km}$ obtained for the mobile sources and respectively for the instants $t_1...t_k$ are associated during the period Dt in order to separate the different sources for each instant $t_1...t_k$ the position (x_m, y_m, z_m) of the mobile emitter is directly localized from the vectors $a_{1m}...a_{Km}$ associated to a same emitter, one emitter being obtained from the different instants t_k (315, Fig. 10; §79, lines 15-36).

In regard to claim 18, Beadle further discloses the transmitters to be localized are mobile (§79-80), where the method is applicable for slow relative motion (§79, lines 39-43; §80, lines 3-7), and in that the vector considered is parameterized by the position of the transmitter to be localized and the speed vector (§98).

Allowable Subject Matter

6. Claim(s) 11-12 would be allowable if rewritten to overcome the objection(s) set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

7. Claim(s) 14-17 is/are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments with respect to various objection(s), have been fully considered and are persuasive. The objections have been withdrawn.

9. Applicant's arguments with respect to the rejection(s) over Sheinvald have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made. Thus, this action is non-final.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred H. Mull whose telephone number is 571-272-6975. The examiner can normally be reached on Monday through Friday from approximately 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Fred H. Mull
Examiner
Art Unit 3662

/FHM/


THOMAS H. TARCZA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600